

those shown in FIG. 4, but the latch has a plate 14b that only provides the hook arm 11b, without any leg (such as 12). Thus, the locking mechanism 70b can operate in the same manner as described in FIG. 2 to lock the display housing 30a to the keyboard housing 40, with the hook arm 11b operating to engage an undersurface of a shoulder 42 of the keyboard housing 40.

Thus, the operations of the mechanisms 70a and 70b in FIGS. 6 and 7 are essentially the same as described above for the mechanism 70, except that one mechanism 70a is responsible solely for controlling the removal of a stylus, and the other mechanism 70b is solely responsible for locking and releasing the display housing 30a.

It will be recognized that the above described invention may be embodied in other specific forms without departing from the spirit or essential characteristics of the disclosure. For example, the stylus removal mechanism 70 (and the associated block 50 and guide tracks) can be located in the keyboard housing 40 instead of the display housing 30. Also, alternative configurations can be utilized to guide the movement of and otherwise support the block 50, to support, guide and hold the stylus 60, to bias the block 50 in a forward direction and to stop the forward and rearward movement of the block 50. Thus, it is understood that the invention is not to be limited by the foregoing illustrative details, but rather is to be defined by the appended claims.

What is claimed is:

1. A stylus removal mechanism comprising:

a stylus;

a block having a chamber for receiving a portion of the stylus;

a first biasing element coupled to the block to bias the block in a first direction;

a latch assembly that includes a plate having a hooked leg;

a second biasing element coupled to the plate to bias the plate in a second direction different from the first direction, with the hooked leg engaging the block against the bias of the first biasing element; and

wherein when the plate is moved in a third direction opposite to the second direction, the hooked leg disengages the block so that the first biasing element biases the block in the first direction.

2. The apparatus of claim 1, wherein the block includes an engaging surface for removably engaging the hooked leg.

3. The apparatus of claim 1, wherein the latch assembly further includes a knob coupled to the plate for manipulation by a user.

4. The apparatus of claim 3, wherein the latch assembly further includes a body portion having opposing first and second end walls, and a first arm and a second arm that are coupled to the knob, the first and second arms extending through the body portion to couple the plate, with the second biasing element coupled to the first end wall for biasing the first arm from the first end wall, and with movement of the second arm limited by the second end wall.

5. The apparatus of claim 4, wherein the plate has an elongated opening through which the first and second arms extend.

6. A portable computing device, comprising:

a. a first housing; and

b. a second housing hingedly coupled to the first housing, the second housing having an interior that stores a stylus, and which houses a stylus removal mechanism, the stylus removal mechanism having a first part that retains a portion of the stylus, and a second part that releasably engages the first housing and the first part so that manipulation of the second part simultaneously

releases the first housing from the second housing and removes the stylus from the second housing.

7. The device of claim 6, wherein the stylus removal mechanism includes:

the first part having a block that has a chamber for receiving a portion of the stylus;

a first biasing element coupled to the second housing and the block to bias the block in a first direction;

the second part having a latch assembly that includes a plate having a hooked leg; and

a second biasing element coupled to the plate to bias the plate in a second direction different from the first direction, with the hooked leg engaging the block against the bias of the first biasing element;

wherein when the plate is moved in a third direction opposite to the second direction, the hooked leg disengages the block so that the first biasing element biases the block in the first direction to remove the stylus.

8. The apparatus of claim 7, wherein the plate further includes a second hooked leg that engages the shoulder when the second biasing element biases the plate in the second direction, with the second hooked leg disengaging the shoulder to release the second housing from the first housing when the plate is moved in the third direction.

9. The apparatus of claim 8, wherein the second hooked leg has an angled surface that slides along the shoulder when the first and second housings are pivoted towards each other.

10. The apparatus of claim 7, wherein the block includes an engaging surface for removably engaging the hooked leg.

11. The apparatus of claim 7, wherein the latch assembly further includes a knob coupled to the plate for manipulation by a user.

12. The apparatus of claim 11, wherein the latch assembly further includes:

a body portion mounted to the second housing, the body portion having opposing first and second end walls, and with the second housing having an elongated opening at the body portion to communicate with the body portion;

a first arm and a second arm that are coupled to the knob, the first and second arms extending through the elongated opening and the body portion to couple the plate;

wherein the second biasing element is coupled to the first end wall for biasing the first arm from the first end wall, and wherein movement of the second arm is limited by the second end wall.

13. The apparatus of claim 12, wherein the first and second arms each has a hooked end, and wherein the plate has an elongated opening having opposing ends, wherein the hooked end of each of the first and second arms extends through the elongated opening of the plate and engages one of the opposing ends of the elongated opening of the plate.

14. The apparatus of claim 7, further including a plurality of guides extending from the second housing to form a track to guide the movement of the block in the first direction.

15. The apparatus of claim 14, wherein the second housing further includes a support plate, with the first biasing element coupled to the support plate and the block to bias the block away from the support plate.

16. The apparatus of claim 7, wherein the block has an angled surface, and the hooked leg of the latch assembly has an angled surface that slidably engages the angled surface of the block when the block is moved in a direction opposite to the first direction.